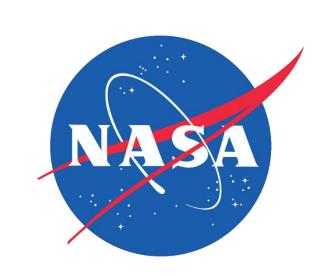
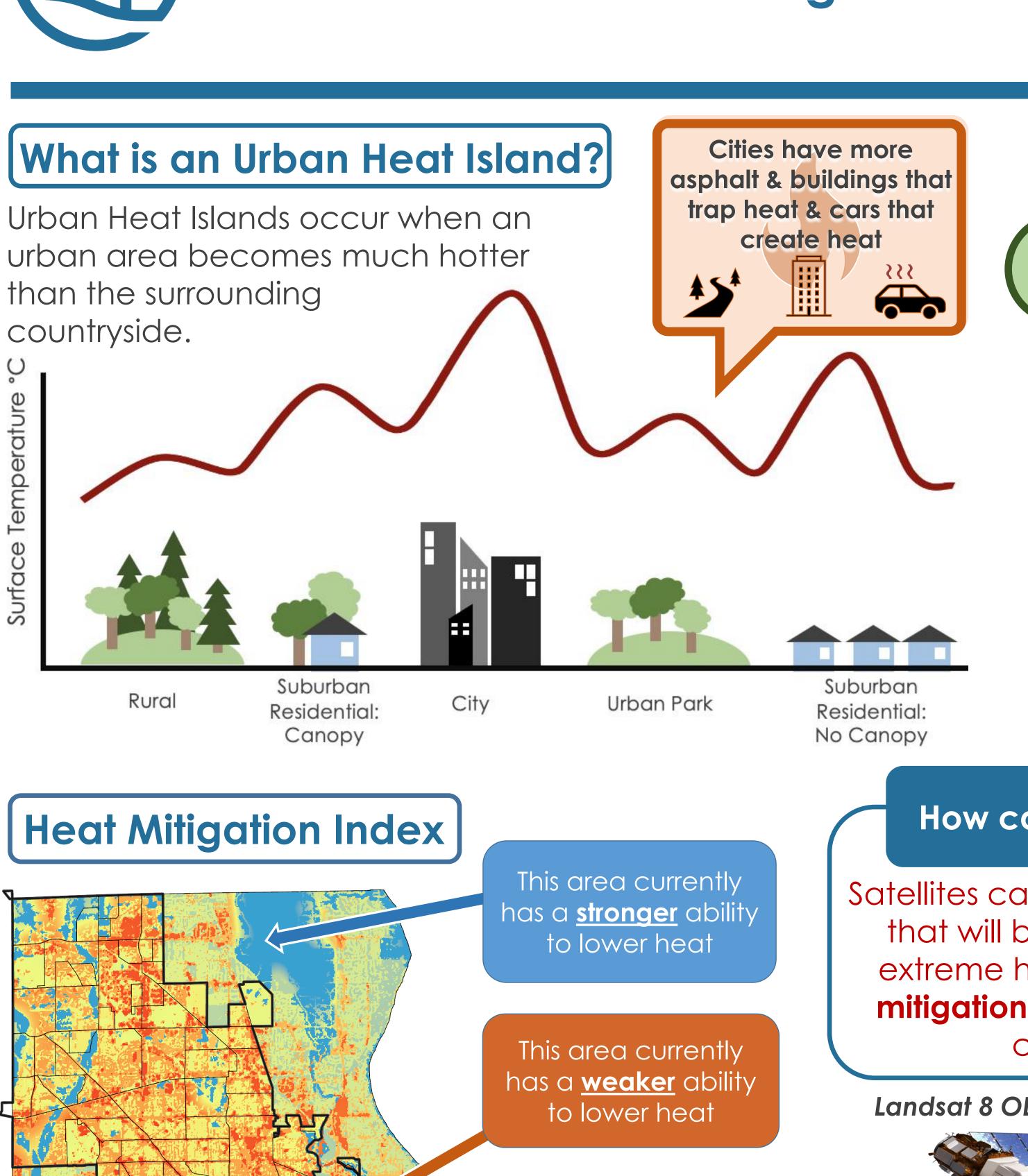


Assessing the Drivers of Urban Heat Vulnerability in Milwaukee Using NASA Earth Observations





Cities have fewer trees & green spaces to keep temperatures cool

How does extreme heat affect everyone differently in Milwaukee?

Different people feel the impacts of extreme heat **unequally**!

000

Factors in our society, health, and environment can make us more vulnerable to heat.



Redlining, discrimination, limited resource access in communities of color

How can satellites help?

Satellites can help us identify areas that will be **most impacted** by extreme heat so we can direct mitigation efforts towards those communities

Landsat 8 OLI/TIRS

ISS ECOSTRESS

Lack of air

conditioning

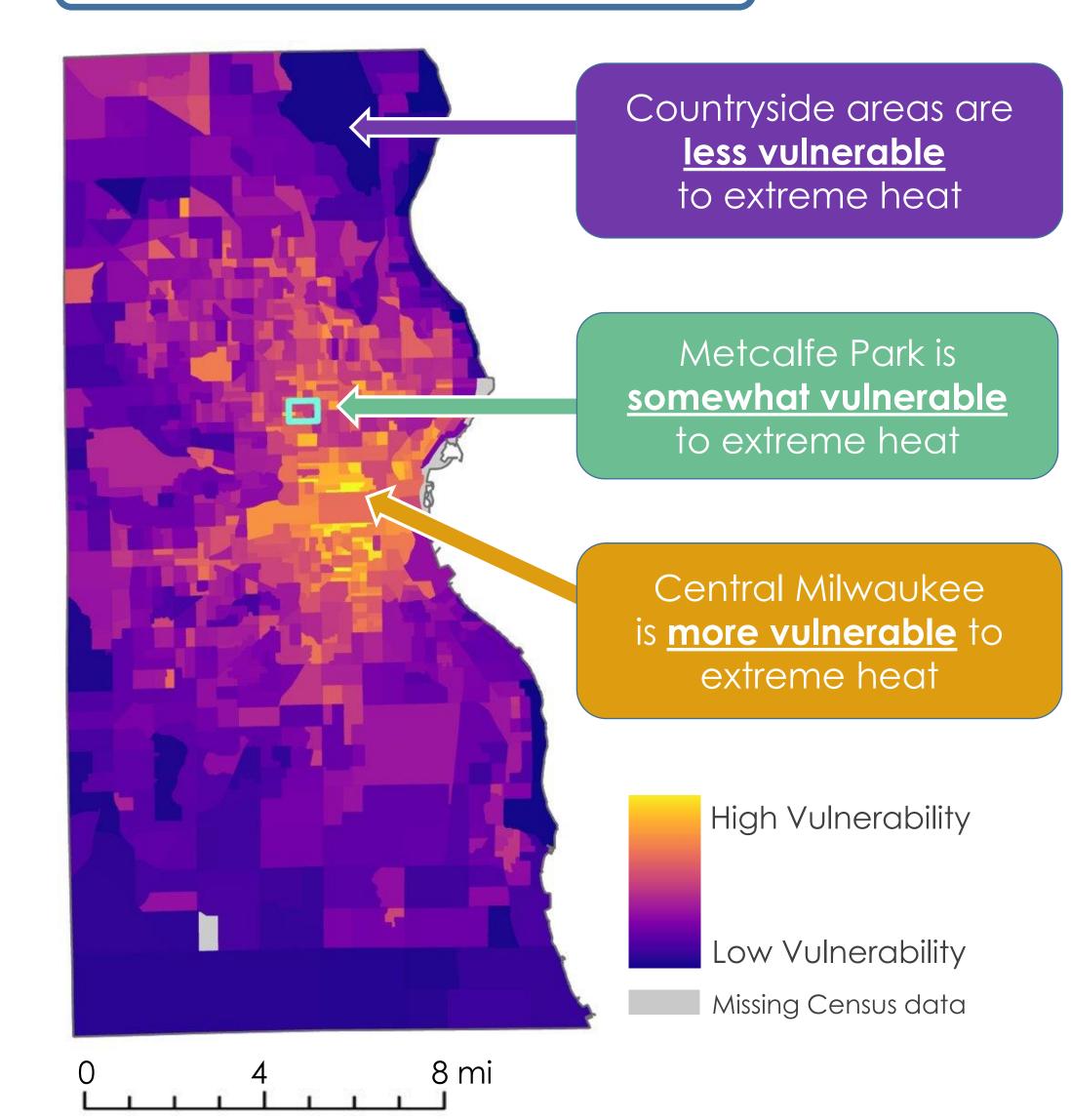
Lower income

Health conditions





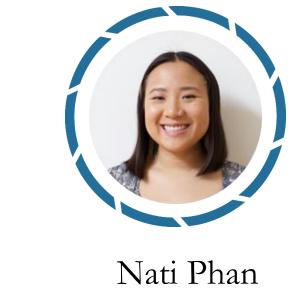
Heat Vulnerability Index





Project Lead





8 mi



High Cooling

Low Cooling

If we increase tree

area down

shade in vulnerable

areas such as Metcalfe

Park, we can **cool** the

Acknowledgements

Fellow: Julianne Liu Advisors: Dr. Kent Ross & Lauren Childs-Gleason (NASA Langley) Partners: Lawrence Hoffman & John Valinch (Groundwork USA)

Past Contributors: Madeleine Tango (Project Lead), Jack Acomb, Annika Harrington, Lisa Sun, Marco Vallejos (Fellow), and Remi Work (Assistant Fellow). Other Support: Christina Dennis, Akshay Agarwal, & Lance Watkins